



US Army Corps
of Engineers

Code Forum

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CEMP-C

Subject: METRIC STEEL REINFORCING BARS

Applicability: INFORMATION

CODE REFERENCES: **ACI 318/318R** - Building Code Requirements for Structural Concrete and Commentary
ASTM A 615 - Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
CRSI MSP-1 - Manual of Standard Practices

1. The Metric Conversion Act of 1975 (PL 94-168) as amended by the Omnibus Trade and Competitiveness Act of 1988 (PL 100-418), and Executive Order (EO) 12770 dated July 25, 1991 requires that new project designs be developed using Metric system of measurement as of January 1, 1994. All new designs should reflect the metric design requirements. There have been problems in the recent past obtaining metric size reinforcing bars. This problem should now be in the past.


2. During 1995-1996 the Concrete Reinforcing Steel Institute (CRSI) worked with the American Society for Testing Materials (ASTM); the American Association of State Highway and Transportation Officials (AASHTO); and, numerous state departments of transportation throughout the United States to achieve the adoption of soft metricated reinforcing steel as the metric standard for rebar usage in the United States. That effort has been successful and specifications for soft metric rebar are now available from ASTM and AASHTO.

3. CRSI has polled its rebar producer members and has reported that the new soft metricated rebars will be available from the majority of producers during the first quarter of 1997. Soft metricated rebars are simply the existing inch-pound rebar sizes with new soft metric names as follows:

| Inch-Pound* | Metric** |
|-------------|----------|
| Bar Size | Bar Size |
| # 3 | # 10 |
| # 4 | # 13 |
| # 5 | # 16 |
| # 6 | # 19 |
| # 7 | # 22 |
| # 8 | # 25 |
| # 9 | # 29 |
| # 10 | # 32 |
| # 11 | # 36 |
| # 14 | # 43 |
| # 18 | # 57 |

4. CRSI is in the process of developing soft metric design construction aids for use by architects, engineers, contractors, etc. Information on these new soft metric products is available from CRSI by phone (847)517-1200 or e-mail info@crsi.org.

5. This Code Forum has been coordinated with HQUSACE's Military Programs Engineering Division (CEMP-EA & CEMP-ET), Civil Works Engineering (CECW-ED) and Civil Works Construction (CECW-OC).



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